

# Type "N" DESIGN FEATURES & SPECIFICATIONS

**Type "N" DESIGN FEATURES:** SGMC Microwaves Type N series are precision grade connectors designed for use with microwave applications requiring excellent performance up to 18 GHz. SGMC offers an extensive line of N precision adapters, receptacles, and cable connectors for various semi-rigid and flexible coaxial cables. Special designs are also available upon request.

- Frequency Range: DC to 18 GHz (Extended Performance)
- Ruggedized construction for repeatability and reliability
- Captivated Center Contact
- Low VSWR and insertion loss



## Type N SPECIFICATIONS (General)

ELECTRICAL		MECHANICAL	
<b>Frequency Range:</b>	DC to 18 GHz (Standard)	<b>Mating:</b>	(5/8") .625-24 UNEF threaded coupling
<b>Nominal Impedance:</b>	50 Ohms	<b>Recommended Mating Torque:</b>	12-15 inch-pounds
<b>Temperature Range:</b>	-65°C to +165°C	<b>Coupling Proof Torque:</b>	30 inch-pounds minimum
<b>VSWR:</b>	1.25:1 Max	<b>Coupling Nut Retention:</b>	Axial force is 100 pounds minimum (Male Only)
<b>Insertion Loss:</b>	0.35 dB Max	<b>Connector Durability:</b>	500 cycles minimum
<b>Dielectric Withstanding Voltage:</b>	2,500 Volts RMS		
ENVIRONMENTAL		MATERIAL	
<b>Corrosion (salt spray):</b>	MIL-STD-202, Method 101, Test Condition B (5% Salt Solution)	<b>Body Components:</b>	Corrosion resistant Type 303 (Stainless Steel) Non-Magnetic, per ASTM-A-484 and ASTM-A-582
<b>Vibration:</b>	MIL-STD-202, Method 204, Test Condition D (20 Gs)	<b>Center Contacts:</b>	Beryllium Copper per ASTM-B-196, alloy C17300, ASTM Temper (condition) TD04
<b>Shock:</b>	MIL-STD-202, Method 213, Test Condition I (100 Gs)	<b>Dielectric:</b>	Fluorocarbon (PTFE) per ASTM-D-1710, Type 1, Grade 1, Class A
<b>Temperature Cycling:</b>	MIL-STD-202, Method 102, Test Condition C	<b>Gaskets &amp; "O" Rings:</b>	Silicone Rubber per ZZ-R-765 & MIL-R-5847 Class 2 A&B, Grades 50~70. (A-A-59588)
<b>Moisture Resistance:</b>	MIL-STD-202, Method 106		
(Consult factory for individual product specifications)		FINISH	
		<b>Body Components:</b>	Passivated per ASTM-A-967 & AMS-QQ-P-35
		<b>Center Contacts:</b>	Gold Plate to a minimum thickness of 50 micro inches per ASTM-B-488, Type 2, Code C, Class 1, over 50 micro inches minimum of Nickel per AMS-QQ-N-290, Class 1

DWG NO. <span style="font-size: 2em; font-weight: bold;">N Series</span>	<b>SGMC MICROWAVE</b> <a href="http://www.sgmcmicrowave.com">www.sgmcmicrowave.com</a>	REVISIONS		
		LTR:	DESCRIPTION: (ECN#)	DATE:
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TITLE:  <span style="font-size: 1.5em; font-weight: bold;">Type "N" DESIGN FEATURES &amp; SPECIFICATIONS</span>	Manufacturer of Precision Coaxial Connectors			
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